

Remarks

The present Amendment is submitted in response to the final Office Action dated April 22, 2009, which set a three-month period for response.

Reconsideration and allowance of the application in view of the following remarks is respectfully requested.

In the final Office Action, claims 1-4 and 6-8 are again rejected under 35 USC §102(b) as anticipated by US Patent No. 5,678,521 to Thompson, et al. (Thompson). Claim 5 is again rejected under 35 USC §103(a) as unpatentable over Thompson in view of US Patent No. 5,381,297 to Weber (Weber). Claim 9 is again rejected under 35 USC §103(a) as unpatentable over Thompson in view of US Patent No. 6,807,947 to Coates, et al. (Coates).

Reconsideration and allowance of the application in view of the following remarks is respectfully requested.

To support the grounds for rejection, the Examiner asserts that Thompson teaches controlling a solenoid valve [20] by applying a first voltage (Boost V_{DC}) to a coil [20] until a first point in time (T_1), then a second voltage (Notch V_{DC}) with a smaller effective value is applied, wherein the first point in time T_1 precedes a point at which the solenoid valve [20] reaches its final position. The Examiner further asserts that injection solenoid controller [202] provides a pulse width modulating activating signal to the solenoid [20], and that controller [202] generates the second voltage (Notch V_{DC}) by pulse width modulating Boost V_{DC} .

Applicants, however, respectfully disagree that Thompson discloses generating a smaller effective voltage by pulse width modulating the first voltage applied to the coil, as claimed.

While Thompson's injection solenoid controller [202] may generate a "pulse width modulating activating signal" to maintain current in a predetermined range, Thompson does not apply a first voltage to a coil until a first point in time and then a second voltage with a smaller effective value is applied, wherein the smaller effective value of the second voltage is realized by pulse-width modulating the first voltage.

That is, Thompson does not teach or suggest that the smaller effective value of the second voltage (Notch V_{DC}) is realized by pulse-width modulating the first voltage (Boost V_{DC}). Because independent claims 1 and 7 recite this limitation, which Thompson does not, Thompson does not anticipate the invention as claimed.

Applicants further respectfully assert that Thompson is not a proper reference under 35 USC §102 pursuant to the guidelines set forth in the last paragraph of MPEP §2131, where it is stated that "a claim is anticipated only if each and every element as set forth in the claims is not found, either expressly or inherently described, in a single prior art reference," and that "the identical invention must be shown in as complete detail as is contained in the ... claim."

Amended independent claims 1 and 7 are therefore patentable under 35 USC §102(b) over Thompson. Claims 2, 3, 4, 6 and 8, which depend from claim

1, also are patentable under section 102(b) over Thompson for at least the same reasons. Applicants, therefore, respectfully request withdrawal of the rejection of claims 1-4 and 6-8 over Thompson under section 102(b), and the allowance of each of claims 1-4 and 6-8.

In response to the rejection of claims 5 and 9 by Thompson under section 103(a) in view of Weber and Coates, respectively, applicants assert that Weber and Coates suffer the same shortcomings of Thompson as stated above. That is, neither Weber nor Coates teach or suggest the feature of that the smaller effective value of the second voltage (Notch V_{DC}) is realized by pulse-width modulating the first voltage (Boost V_{DC}), as claimed, so the proposed combinations fail to render obvious claims 5 and 9.

Applicants, therefore, respectfully request the withdrawal of the rejections of claims 5 and 9 under section 103(a) by Thompson respectively combined with Weber and Coates.

Accordingly, the application is believed to be in condition for allowance. Action to this end is courteously solicited. However, should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application in condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'M. Striker', with a long horizontal flourish extending to the right.

Michael J. Striker
Attorney for Applicants
Reg. No. 27,233
103 East Neck Road
Huntington, New York 11743
631 549 4700